

# STRATEGIC INTER-ORGANIZATIONAL ENVIRONMENTALISM IN THE US: A MULTI-SECTORAL PERSPECTIVE OF ALTERNATING ECO-POLICY ROLES<sup>†</sup>



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During the last several decades, numerous policies and programs intended to advance environmental goals have been formulated in the US by governmental bodies and implemented by businesses and nongovernmental organizations. This article forwards a multi-sectoral perspective that business and nonprofit organizations have also been significantly involved in environmental policy and program formulation, as well as implementation, and that governments have also fulfilled the latter strategic role in US environmental policy. In this article, nine US environmental initiatives are described and categorized according to

which of the three sectors' organizations were significant formulators of the programs and which were significant implementors. Implications for future research include investigation of other environmental dyadic program combinations in addition to those presented, extension of the present analysis beyond dyads into environmental policy networks, inclusion of the strategic environmental program evaluation stage to complement formulation and implementation and exploration of effectiveness variables in cross-sectoral, inter-organizational collaborations. Implications for educators and practitioners are also presented. Copyright © 2002 John Wiley & Sons, Ltd and ERP Environment.

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## INTRODUCTION

Cross-sectoral, inter-organizational interactions are not new phenomena, since as long as governments, businesses and nonprofit organizations have existed in modern societies, these entities have, on a not infrequent basis, at least exchanged resources, such as through buying and selling goods and services. Most recently, public-private partnerships and strategic alliances have become popular topics of organizational research. In the last few decades, with the rise of nonprofit organizations and increasing societal interest in environmental policy, such cross-sectoral, inter-organizational interactions have greatly increased in number and intensity in this policy and program area (Stafford and Hartman, 1996; Elkington, 1998).

One reason for the emergence of these 'green' inter-organizational, multi-sectoral collaborations may be a realization by all parties of the high level of complexity involved in both the natural environment itself and in human organization interactions with the natural environment, which occur at multiple levels and in multiple systems (Starik and Rands, 1995). This complexity may require multiple organizations with different but complementary environmental orientations, responsibilities, skills, resources (Das and Teng, 2000) and other organizational characteristics to join efforts to resolve difficult multi-faceted, environmental issues.

Another potential and related explanation for these cross-sectoral, inter-organizational collaborations in the environmental policy area is the need for organizations in one sector, with its particular orientations and constraints, to learn from those in another sector, with other orientation and constraint profiles, how to accomplish mutually desired environmental goals in program areas that are fraught with a lack of adequate information but no shortage of potential value conflicts (Aggeri, 1999).

These cross-sectoral, inter-organizational collaborations could also be considered a type

of inter-organizational 'policy network', which attempts to balance autonomy and control among multiple institutional actors in pursuit of mutually desired objectives (Haggard and Kaufman, 1992). As such they may require at least three types of linkage activity: information sharing, resource sharing and joint action (Honadle and Cooper, 1989). To achieve better coordination between and among policy network members in overcoming threats to autonomy, lack of consensus and conflicting requirements, network participants have been advised, among other things, not to neglect implementation issues, to shorten planning and implementation cycles and to build trust and capacity for coordination (Brinkerhoff, 1996).

Finally, it has also been suggested that the nature of environmental problems, which can affect all organizations one way or another and for which all organizations may bear responsibility, implies that these problems should be addressed with a 'multilateral ecocentric approach', in which businesses, consumers and governments all need to play important roles (Iyer, 1999), perhaps as part of their respective 'enterprise strategies' (Hemphill, 1996; Stead and Stead, 2000).

In addition to these theoretical reasons forwarded to explain the existence of cross-sectoral, inter-organization collaborations, a number of practical reasons can also be advanced. Organizations may cross sectoral and organizational boundaries and become implementors because start-up risks and costs have already been invested by another sector or organization, the context has already been created, or first-mover advantages have already been realized but second-mover advantages still exist. Formulators may cross sectoral and organizational boundaries because the scale of implementation required another sector or organization, or early involvement of the implementing sector or organization was not desirable or possible. In addition, a number of organizational concepts might be involved in



these collaborations, including degrees of freedom, distinctive competencies, societal expectations and elite leadership interests.

This article advances a description and an initial categorization of these cross-sectoral, inter-organizational environmental collaborations in the US, and forwards a basic framework for increasing the understanding of these interactions by environmental researchers, educators and practitioners.

### STRATEGIC ENVIRONMENTAL MANAGEMENT

A number of organizational researchers in the past decade have identified and attempted to develop a cross-disciplinary sub-field that can be labeled strategic environmental management, that is, the integration of the fields of strategic management and environmental management. This scholarly (and, to an increasing extent, practitioner) integration can be described as an application of strategic management principles, processes and products to the general study of human organization interactions with their respective natural environments (Shrivastava, 1996; Stead and Stead, 1996; Starik and Gribbon, 1993; Hawken, 1993).

This article focuses on two aspects of strategic management. The first is the convenient dichotomization between strategic formulation, or plan-making, and strategic implementation, or plan-executing. The second aspect is the typical trichotomization of government, business and nonprofit organizations, specifically the concepts that each of these sectors are composed of organizations that practice strategic management, and that organizations collaborate with one another across these sector categories. Regarding strategic formulation and implementation, these process categories have often been described as sequential but mutually reinforcing, with each needing to be accomplished effectively for successful strategic goal realization. For purposes of distinction, by formulation, we mean initiating the

relationship/activity and providing its context, direction, scope and impetus; by implementation, we mean organizing resources, setting up operating systems and applying these resources to these systems for results (Hofer and Schendel, 1978).

While these two strategic process categories are usually applied to a single business organization, they can also be applied to other types of organization, such as government and nonprofit organizations, and to multiple, even cross-sectoral, strategic alliances, in which one organization of one sector leads in formulating the collaborative strategies and the other leads in implementing these strategies (Johnson, 1995; Long and Arnold, 1995). The latter set of co-authors, who have been involved in several partnerships between environmental nonprofit organizations and either businesses or governments, identified that such connections typically had four phases: seed; initiation; execution and closure/renewal. We condense these four separate phases into two larger categories in this article, with the seed and initiation phases corresponding to strategic formulation, and the execution and closure/renewal phases corresponding to our strategic implementation stage. We acknowledge that, while these phases and stages can be conceptually distinguished, in actual practice, significant interplay exists between or among them. This back-and-forth movement between, say, strategic formulation and strategic implementation, has been characterized as strategic evaluation, in which continual or periodic assessments are made by relevant stakeholders of whether or not a collaboration (or other strategic approach) is successful and whether or not adjustments need to be made. This interplay between 'front-end' and 'back-end' strategic processes exhibits aspects of both intra-organizational and strategic network alliance processes, in that each involves working with cooperators 'upstream' or 'downstream' in what might be called the value chain in inter-organizational collaboration and environmental policy management (Hartman and Stafford, 1998).



In addition to strategic management process perspectives, this article draws upon stakeholder management and inter-organizational collaboration concepts to highlight the existence and development of the environmental strategic alliances described. We assume that these environmental policy and program allies are stakeholders of one another, specifically, as are the business, government and nonprofit sectors, generally, since most stakeholder listings include representatives of these latter sectors. As Freeman (1984) suggested, most of these stakeholders make decisions as stakeholders by attempting to engage in at least two activities: planning and transacting. Regarding inter-organizational collaboration, Gray (1985) identified several process steps in the inter-organizational collaborations she studied, including direction-setting and structuring, and these characteristics have also been found to be important in subsequent research on the topic (see e.g. Huxham and Vangen, 2000). The present article associates formulation with stakeholder planning and inter-organizational direction-setting, and implementation with stakeholder transactions and inter-organizational structuring.

These cross-sectoral, inter-organizational strategic collaborations can be found in many sub-areas of environmental policy and programs (see e.g. Khator, 1999; Cardskadden and Lober, 1998) and throughout economic/industrial sectors. For example, integrated resource planning (IRP), which

is a multi-sectoral approach to community energy planning currently being attempted in more than two dozen US communities, is typically initiated and promoted by various state public utility commissions, with significant application not only to these government entities, but to investor owned utility companies and their consumer and environmental stakeholder groups, as well. Successful IRP efforts usually involve all organizations representing all three sectors, and each is invited to participate in detailed energy supply and demand planning, with the utilities usually implementing these long-term plans (Mitchell, 1992; Hirst *et al.*, 1995; Keeney and McDaniels, 1999).

In this article, we advance the concept that a wide variety of cross-sectoral, inter-organizational environmental formulation and implementation activities have been attempted (see Table 1), and that the commonly held perspectives that government is the main formulator and that businesses and nonprofit organizations are only implementors in this important area of public policy need significant reform to reflect on-going realities. We suggest that these cross-sectoral inter-organizational environmental collaborations have arisen within the context of three related phenomena – (i) the increasing consideration by governments to supplement environmental command-and-control regulations with voluntary approaches that include more stakeholder input, (ii) the relatively recent partnerships between some

Table 1. Nine multi-sectoral US environmental initiatives by strategic process stage

Sector which formulates/initiates	Sector which implements/applies		
	Governments	Businesses	Nonprofits
Governments	Procuring recycled paper	Green Lights Program	Low-income weatherization
Businesses	Nuclear power subsidies	Industry Green Codes of Conduct	Green philanthropy
Nonprofits	Debt-for-nature swaps	Cooperative environmental R&D	Environmental coalitions/lobbying





businesses and some environmental organizations and (iii) the ever-growing presence of nonprofit organizations in environmental policy and program formulation and implementation. Initial assessments of these external forces indicate that governments still have a significant learning curve in incorporating more environmental volunteerism into their regimes (Collins and Starik, 2001; Rosenbaum, 1998; Vig and Kraft, 2000), that a wide variety of different kinds of business and nonprofit organization have produced a complex set of private environmental partnerships (Elkington, 1998; Hartman and Stafford, 1998; Clair *et al.*, 1995; Turcotte, 1995) and that NGOs continue to gain influence in both developed and developing country social and environmental policies and programs (Hula and Jackson-Elmoore, 2001; Doh and Teegen, 2002).

We have focused on the clearest and simplest types of cross-sectoral, inter-organizational, environmental policy and program, in which organizations in one sector have been primarily responsible for formulation and those in the same or another sector have been primarily responsible for implementation. We begin with organizations in the government sector as formulator, then move to organizations in the business sector as formulator and finally identify those US environmental policies and programs which nonprofit organizations have initiated or formulated, listing some of the strengths and weaknesses of each program.

## GOVERNMENT AS ENVIRONMENTAL POLICY FORMULATOR

Typically, governments are seen as the driving force, that is, the formulators, in environmental policy and programs. While regulation has been a main area of attention in public organization environmental activity, government's many other roles, including procurement, taxation, subsidization, financial and other asset

management, and societal arbiter and change-agent, are also involved in both environmental policy formulation and implementation. This section contains three examples of the conventional perspective of government formulation in this area of public policy, with businesses and nonprofit organizations filling implementation functions. However, the last example begins a discussion of less traditional (or less obvious or publicized) roles of organizations in environmental policy and programs, with government also playing an implementation role. In the two sections that follow this one, the formulation role of businesses and nonprofits is highlighted.

### *Government formulates/business implements – green lights energy efficiency program*

Since the mid-1980s, the US Environmental Protection Agency Green Lights program (later incorporated into a program called Energy Star) has involved numerous businesses (as well as nonprofit organizations) in a long-term voluntary program to assess their respective current facilities' lighting inefficiencies and to plan for and begin to implement upgraded lighting equipment financing, purchasing and installation. As of April 2000, the Energy Star program had more than 3100 member organizations, mostly businesses, each with intentions to increase lighting efficiency by about a third, typically within a 2 year payback period, thereby helping to conserve fossil fuel and other electricity resources and to reduce their associated emissions (US EPA, 2000). Participants sign a memorandum of understanding with the US EPA and then the latter (or its contractors) provide the environmental information and monitor progress. This program is one of the most commonly cited success stories of government-business environmental collaboration, due to the fact that, since its beginning, the program claimed to have prevented 46.9 billion pounds of CO<sub>2</sub> from being released into the atmosphere and to



have saved more than \$2.2 billion in energy bills. However, when the program was first formulated and implemented, one nonsuccess was the fact that no recycling system had been established to utilize the materials in the discarded light bulbs and ballasts. This oversight has since been rectified. Other generic environmental policy examples of government formulation and business implementation are environmental enforcement actions (fines and other penalties), environmental taxes (such as carbon or BTU taxes) and environmental award programs initiated by public organizations at any level for business environmentally oriented performance.

*Government formulates/nonprofits implement – weatherization program*

Since the mid-1970s, the US federal government has funded an energy conservation program, now run by its Department of Energy, to 'weatherize' the homes of low-income and elderly US residents. As of mid-1999, more than 500 million homes in the US had been weatherized under this program, with an average primary energy savings of 23% (US DOE, 2000). Typically, beneficiaries of this program have needed to qualify for the service, based on official poverty-level-based income guidelines. The services have included installation of caulking, weatherstripping and insulation, as well as minor home repairs, such as door and window replacement, all of which have been proven to be cost-efficient energy conservation measures. While federal funds often have been allocated to state energy or energy assistance offices, typically these resources have been transferred to nonprofit agencies to hire and supervise (often low-income) employees to perform the installation work. Many of these nonprofit agencies were (and are) Community Action Agencies, created during the 1960s War on Poverty program of the US Office of Economic Opportunity. On occasion, these agencies have subcontracted out

various weatherization tasks, either to other nonprofit organizations or to for-profit small businesses. The strengths of this program have been the delivery of low-cost/no-cost energy conserving measures to the needy, while one of the weaknesses has been the quality of the service delivery, which has sometimes been performed by otherwise hard-to-employ trainees.

Other generic environmental policy examples of government formulation and nonprofit organization implementation are energy assistance programs, in which governments subsidize nonprofits to identify and arrange for energy supply deliveries to low-income energy consumers, and the funding of public service law firms and other social service organizations to advocate for low-income residents to ensure these energy benefits are received.

*Government formulates/government implements – 'green' government procurement*

This section concludes with an example of a strategic environmental inter-organizational approach that is quite common in fact, but is not often highlighted in inter-organizational literature – the cases in which government organizations implement environmental policy and programs: in this case, those which are formulated by the same or other government organizations. One example is the US federal government, via Executive Order (first through number 12873, then through 13101), promulgating requirements for the procurement of 'environmentally preferable' products, such as recycled paper and various office products for other federal government organizations. According to this Presidential order, all US government agencies have been directed to purchase office paper with at least 20% recycled post-consumer content (increased to 30% as of 31 December 1998). While the obvious intent of such an environmental policy is to reduce the US federal government's paper use and its associated environmental impacts,



unfortunately, compliance with this policy has been spotty at best, with even the US Environmental Protection Agency (EPA), one of the drivers of this policy, not in full compliance.

Other generic environmental policy examples of governments both formulating and implementing environmental policy include environmental regulations and legislation initiated by one level of government and applied by a 'lower' level of government, cross-regional environmental policy agreements (such as transboundary, bio-region programs) and government-to-government environmental information sharing. One difficulty in identifying governments as either formulators or implementors is that government contractors (individuals and/or businesses, such as consultancies) are sometimes major public policy designers or public program operators, including those involved in environmental policies and programs.

## BUSINESS AS ENVIRONMENTAL POLICY FORMULATOR

As was indicated earlier, the traditional environmental policy and program perspective focuses on the central role of various governments in formulating policy in this area. Less well known in the environmental policy area than government-initiated policies are the increasingly common business-initiated efforts to prevent pollution or limit depletion/deterioration of natural environments. This section contains three examples in which business, rather than government, or in addition to government, has played a major role in environmental policy and program formulation, and, similar to the preceding and following sections, each of the three policy sectors (business, government and non-profit organizations) has played an implementation role.

### *Business formulates/government implements – nuclear energy subsidies*

One set of environmental policies that appear to be driven, that is formulated, by businesses is energy-related subsidies, especially nonrenewable energy-related subsidies. One set of such subsidies which has received significant attention in the past is nuclear power subsidies, which have played some role in virtually every step of the nuclear fuel cycle – from mining, through operation, to disposal/recycling. For example, nuclear industry advocates have long supported the Price–Anderson Act of 1957 (and as amended in 1988), which limits the liability of nuclear power firms in nuclear power accidents. One study found that this act subsidized the insurance premiums of nuclear power firms from between \$22 million to \$60 million per nuclear reactor per year (Dubin and Rothwell, 1990). To the extent that significant nuclear power accidents would be negative environmental events, this and other nuclear energy subsidies can be considered industry-formulated/government-implemented environmental policy. The positive and negative features of such a policy may be obvious, with the primary ones appearing to be greater energy supplies and higher health risks, respectively.

Other generic environmental policy examples of business-formulated, government-implemented programs are the full range of subsidies governments give energy and environmental service suppliers and distributors, in which these businesses lobby for and help design and politically maintain and extend such payments, and green labeling programs, in which businesses design and offer products for 'green' certification by government (and sometimes nonprofit) organizations.

### *Business formulates/business implements – green codes of conduct*

Numerous business environmental codes of conduct have been developed by individual



firms, industry associations and business-related umbrella organizations (Prakash, 2000). These have ranged from the inclusion of environmental concerns into traditional firm mission statements and annual reports (such as in those of Minnesota Mining and Manufacturing – 3M) to the strategic alliances organized specifically for the purpose of advancing environmental policies and programs in hundreds of businesses, such as the World Business Council for Sustainable Development. Such codes often lay out both broad and specific steps to which its formulators commit, regarding such topics as energy conservation, cooperation with environmental regulators and going ‘beyond compliance’ in environmental programs. The positive side of such ‘green’ codes being both formulated and implemented by business is that these can raise the awareness of firms and their stakeholders to environmental issues and increase the legitimacy and effectiveness of voluntary environmental programs. The negative side of these environmental codes of conduct is that they may be nothing more than ‘lip service’, essentially serving to ward off criticism or co-opt environmentally oriented stakeholders. Other generic environmental policy examples of both business formulating and implementing environmental programs are supplier green certification programs, cross-industry self-regulatory efforts, and, of course, the environment-related industries which offer environmental insurance, accounting, auditing, legal and consulting services to other businesses.

#### *Business formulates/nonprofits implement – green philanthropy*

Another area of environmental policy and programs that business often initiates and the ‘third-sector’ – nonprofit organizations – often implements is environmentally related philanthropy. Many business organizations, usually individual large firms, such as Hewlett–Packard, Waste Management, Inc.

and Church and Dwight, have developed programs to donate significant sums in support of various environmental causes, usually carried out by environmental organizations and other nonprofits, either at the national or local levels. Among the environmental programs that have been supported by ‘green’ philanthropy are wildlife conservation, waterway and park cleanup days, environmental education and tree planting activities. While the full extent of such business-formulated environmental giving is not exactly known, indications are that it is among the preferred business options for interacting with environmental stakeholders. Of course, the negative aspect of this kind of environmental program, similar to environmental codes, is that businesses may attempt to co-opt potential environmental critics with their donations. On the positive side, however, numerous environmental programs, such as those implemented by the Management Institute for Environment and Business (MEB, now a program of the World Resources Institute), might never have existed or remained viable without such business funding. Again, similar to ‘green’ codes, ‘green’ business philanthropy may have the potential cost of undue and unproductive co-optation.

Other generic examples of business formulation and nonprofit implementation are stakeholder panels, such as consumer assistance panels and focus groups, in which businesses solicit information about environmental matters from representatives of the public and nonprofit organizations.

#### **NONPROFIT ORGANIZATIONS AS ENVIRONMENTAL POLICY FORMULATORS**

Since environmental policy is an area of significant societal concern and debate, nonprofit organizations are able to play leading roles in formulating policies in specific





sub-areas. Once again, the fact that organizations other than governments can formulate environmental policies and programs is not widely perceived, yet the three examples that follow are neither rare nor inconsequential.

*Nonprofits formulate/governments implement – debt for nature swaps*

The first example of nonprofit organization environmental policy initiation is debt-for-nature swaps, which are financial mechanisms that exchange developing country debt for environmental programming in those affected nations. Approximately a dozen such 'swaps' of a significant size (totaling US\$200 million) have been activated and publicized in the last decade, each having either been initiated or co-initiated by one or more internationally oriented environmental nonprofit organizations. In most schemes, nonprofit organizations, first, identify a debt-for-nature swap opportunity, second solicit funds from their members or other stakeholders, third, initiate multilateral negotiations among the developing country borrowers and lenders, and itself, and, finally, arrange to have its donations pay off the reduced debt and fund one or more environmental conservation programs in the relevant developing country. Similar to the other examples in this article, debt-for-nature swaps have their environmental strengths and weaknesses. On the plus side, these programs, while few and small, have helped to address the poverty–environmental deterioration linkage in several countries, perhaps setting an example for other environmental projects and for other developing countries. On the minus side, the rarity of these programs has been perceived by some as mere drops of promise in a virtual sea of economic and environmental despair.

Other generic environmental policy examples of nonprofit formulation and implementation are overall environmental consumer

advocacy before environment-related regulatory boards, environmental group lobbying to establish and maintain such boards and the provision of environmental education and information in public education programs.

*Nonprofits formulate/business implements – cooperative environmental R&D projects*

A second example of nonprofit-organization-initiated environmental policy is the set of efforts of groups such as the Environmental Defense Fund to launch cooperative research projects with business firms, such as McDonald's, General Motors, SC Johnson Wax and Starbucks Coffee. In these and related cases, collaboration-oriented, nonprofit environmental organizations are more likely than not to make the initial contacts and provide the sustaining drive in encouraging businesses (and, in some cases, governments) to explore one or more environmental options, that can require significant investments in research and development or related organizational functions. Universities, as nonprofit organizations, also often have faculty, staff and students who have helped businesses identify one or more environmental opportunities. One university in the mid-Atlantic region of the US has worked with its suppliers to conserve energy, improve recycling systems and develop renewable energy resources. Of the three examples mentioned in this section, this nonprofit-formulated environmental policy program set appears to have the least amount of risks or costs, compared with its advantages. Environmental opportunities are developed and explored, environmental information is collected, processed and disseminated and inter-organizational relationships are built and strengthened on mutual respect for one another's environmental research talents, efforts and outcomes.

Other generic environmental policy programs involving nonprofit formulation and business implementation are energy supply



'lifeline' rates (lower-cost supplies of base line amounts of fuel for low-income energy consumers) in which nonprofit organizations are both the chief proponents, program designers and recipient locators, and professional environmental award programs, such as the annual awards to top environmental corporate (and other projects and programs) by the (US) National Association of Environmental Professionals.

*Nonprofits formulate/nonprofits implement – environmental coalition lobbying*

The last example of nonprofit-initiated environmental policy approaches is also one in which nonprofits are primarily responsible for implementation as well – putting together and exercising coalition power, especially through environmental legislative and executive lobbying. The most recent of many examples is the organizing that preceded and continued throughout the December 1997 Kyoto conference on climate change (and at The Hague Conference of Parties in 2000). Numerous large, nonprofit organizations, including the Sierra Club, the National Resources Defense Council and the Environmental Defense Fund, were generally aligned to lobby US and UN government officials to restrict carbon dioxide emissions based on 1990 levels. While such environmental coalition lobbying is commonplace and has long been observed by both academics and practitioners, this example is used here to illustrate yet another nongovernmental initiative in the environmental policy arena. In addition, coalition lobbying may need to be given more research scrutiny in the future, since the NAFTA and other trade debates often demonstrate that these coalitions are not always replicas of one another, and since business and nontraditional NGOs, sometimes characterized as the 'wise-use' movement, have emerged as environmental coalition lobbyists, as well. The advantages and disadvantages of such lobbying coalitions are the traditional pros (i.e. voice and decentralization) and cons (i.e. conflict and fragmentation) of political pluralism.

Other generic environmental policy programs involving both nonprofit formulators and implementors are the actions of a large number of environmentally oriented foundations who assist other environmental groups, either through advice or funding, the environmental education and information projects of environmental think tanks, such as the World Resources Institute and Worldwatch, which are used by other more activist environmental organizations in advocacy roles, and the efforts of nonprofit organizations to 'green' themselves through design and implementation of internal environmental management systems.

## DISCUSSION AND IMPLICATIONS

In this article, we have attempted to demonstrate that different organization and natural environment policy-oriented activities could be categorized along two dimensions – strategic management stage, that is, formulation or implementation, and organizational sector type, that is, government, business and nonprofit organizations. Our conclusion is that a number of environmental cross-sectoral linkages can be identified, even though the governmental sector is often perceived to be the main environmental policy driver.

The implications of this description and initial analysis for researchers are that attention to both formulation and implementation can be given to all three sectors and that identifying the particular circumstances of each sector on each environmental issue might yield some interesting distinctions about the types and degrees of various environmental cross-sectoral collaborations. While some genericizing of this article's framework is possible (see Table 2), one of our key points is that each of the three sectors have been, are currently and could be involved in many different types of environmental policy and program formulation and implementation. For example, since government, among the three sectors, is



Table 2. Generic multi-sectoral environmental initiatives by strategic process stage

Sector which formulates/initiates	Sector which implements/applies		
	Governments	Businesses	Nonprofits
Governments	Cross-regional environmental policy agreements Government-to-government environ. information sharing	Environmental fines Environmental taxes Environmental public awards programs	Energy assistance programs Publicly funded environmental advocacy programs
Businesses	Environmental subsidies Environmental labeling programs	Green supplier certifications Cross-industry self-regulatory programs Environmental B2B products/services	Environmental stakeholder advisory panels and surveys
Nonprofits	Environmental consumer advocacy Environmental group information campaigns Environmental education programs	Energy supply consumer subsidies Environmental awards programs	Environmental foundation funding of environmental group activities Environmental think tank information programs Internal environmental greening programs

the most typical legitimate source of police power, we might hypothesize that the ultimate implementation – enforcement – of environmental regulations would reside with the public sector. However, any of the three sectors could (and do) initiate these and other environmental policies. As another example, because business as a sector has more available or discretionary financial resources, we can hypothesize that this sector would be most likely to initiate or formulate plans for ‘green’ philanthropy. However, since the total level of such philanthropy may be less than environmental contracts let by governments, yet also be less politically problematic, we could hypothesize that nonprofits would be more likely to implement environmental government-contract-funded programs rather than cultivate ‘green’ business philanthropy. Rather than view this lack of framework generalization as a limitation, researchers and practitioners might alter their perspectives on

whether sector membership is a barrier to environmental policy formulation and/or implementation. Organizations in any of the three sectors might be involved in such policies at multiple points in their respective processes.

While the units of description and initial analysis in this article are dyadic, that is, between a type of organization as formulator and a type of organization as implementor, policy researchers and practitioners will recognize that all of these organizations are embedded in one or more networks and have many different dyadic relationships with other environmental policy allies. In addition, some cross-sectoral inter-organizational collaborations involve more than just dyads. Multi-stakeholder environmental policy dialogues, such as the US Enterprise for Environment (E4E) effort at the end of the 1990s, multi-stakeholder environmental rulemaking, such as the US EPA’s Common Sense Initiative in the mid-1990s, and voluntary environmental





programs, such as the ongoing US EPA Project XL, all involve organizations that represented all three societal sectors. Moving beyond dyadic relationships in environmental programs tends to widen the scope of such relationships and programs, potentially increasing both opportunities and risks to the participants. Some work has begun in this more complex area, indicating that such three-way environmental approaches can widen participants' interest (Feyerherm, 1995), can more realistically reflect multi-lateral relationship dynamics (Rowley, 1997) and can lead to positive programmatic outcomes (Collins and Starik, 2001).

A next step in examining environmental policy formulation and implementation is to begin to explore the effects of such networks on the inputs, processes and outputs of these and other cross-sectoral or inter-organizational environmental policy relationships. One set of authors who have studied strategic networks recommends structure, positioning, resources, costs and benefits as possible variables of interest to future researchers of this topic (Gulati *et al.*, 2000). In addition, cross-sectoral, inter-organizational interactions may require different sets of managerial skills and behaviors over different program stages, with a possible key to program success being the ability of downstream partners to learn from upstream partners by sharing both personnel and information (Lei *et al.*, 1997). One interesting aspect of these collaborations is the extent to which social network variables, such as personal and organizational trust, and commitment, for example may be involved in cross-sectoral environmental networks (Hutt *et al.*, 2000). Returning to a previous point, the complexity involved in environmental issues implies significant learning, both inside and outside the focal organization, so each of these variables could be relevant in future environmental policy and program management research.

More formally, a series of research propositions can be forwarded here to initiate further consideration of the many variables that are

likely involved in considering cross-sectoral inter-organizational environmental collaborations. As mentioned, such cooperative approaches can be complex networks of relationships with many input, process and outcome variables. On the one hand, organizations in different sectors apparently need to share similar strategic characteristics to forge and maintain links, such as alliance rationale and structural preferences (Das and Teng, 2000), but on the other hand, they need to complement one another, so that the multiple tasks in environmental strategic formulation and implementation are done efficiently and successfully. In a sense, environmental strategy formulation and implementation, each with its different scope, timeframe and requisite skills, can be considered complementary assets (Christmann, 2000), not only within firms, but among environmental strategic allies. Following Paton's (1999) discussion of capital and environmental strategy influences, organizations in all three sectors may have access to at least eight different types of capital that have variable influences on their respective environmental approaches. Given that different organizations and different sectors have access to different types and amounts of such capital, cross-sectoral inter-organizational environmental collaborations may be bringing various combinations of these assets that appear to would-be collaborators as good 'fits'. The question researchers may want to ask is whether the need for similarity or complementarity is greater, resulting in the following alternate propositions.

*P1: The greater the need for similarity in environmental goals, strategies, structures and systems, the greater the likelihood that organizations in the same sector will both formulate and implement environmental policies and programs.*

*P2: The greater the need for complementarity in environmental goals, strategies, structures and systems, the greater the likelihood that organizations in different sectors will be involved in environmental policy and program formulation, on the one hand, and implementation, on the other.*





Environmental policies and programs have highly varying numbers of human stakeholders, with some, such as industry specific environmental regulations, involving far fewer organizations and individuals than others, such as public energy conservation programs. Given that wide-scoped environmental policies and programs may garner more public attention than more narrowly focused efforts, we can propose that these environmental activities will interest more human stakeholders throughout society.

*P3: The greater the number of impacted stakeholders, the greater the likelihood that organizations in more than one sector will be involved in environmental policy and program formulation and implementation.*

These more generalized propositions can be further specified based on the relative characteristics of organizations in each of the three sectors. As a group and in the most identifiable clusters within each, the US business sector has the greatest amount of financial resources, compared with the other two sectors, but is least likely to take on any significant risk associated with environmental policies and programs (at least with those with unpredictable or longer-term payoffs). Non-profit organizations as a sector have the least amount of financial resources to dedicate to environmental policy and program formulation and implementation (though they often adopt long-term benefit horizons), while governments as a sector have most often been associated with providing public goods, such as human safety and health protection. Therefore, researchers might explore the following propositions.

*P4: The greater the perceived financial risk of environmental policies and programs, the less likely that business organizations will be involved in either or both formulation and implementation activities in these areas.*

*P5: The greater the need for financial resources to effectively formulate and/or implement environmental policies and programs, the less likely that nonprofit organizations will be involved in either*

*or both formulation or implementation activities in these areas.*

*P6: The more likely environmental issues are perceived to be human safety and health related, the more likely governments will be involved as either environmental policy and program formulators or implementors.*

An additional area of research that would extend the present study might focus on a third (and often neglected) strategic management stage – strategic evaluation, including monitoring – and public/private/civil sector environmental policy roles. While all three sectors may be involved in inspections and other environmental program monitoring steps, both theoretical and practical arguments can be made that governments should lead in this area (as society's ultimate enforcers), but that, given limited public budgets, both business self-monitoring and nonprofit monitoring of business and government accountability are appropriate. The emerging Global Reporting Initiative, led by nonprofits, but joined by both government and business representatives, appears to highlight this multi-sectoral evaluation role (GRI, 2000).

Finally, some combinations of cross-sectoral, inter-organizational collaborations may be more effective than others, and some organizations may be more effective in environmental collaborations than others. An emerging stream in the strategic alliance literature is exploring whether or not experience in cross-sectoral collaborations can help in developing skills in identifying potential collaborators and in the negotiation, management and monitoring of program agreements (Simonin, 1997).

Implications for environmental management education are perhaps obvious. This framework can be used as a tool to demonstrate to students the nature of environmental collaboration using the organizing principles of formulation/implementation and their relationships to the three organizational sectors. Either class sessions or projects could highlight one or more cells in this matrix for both organizing and comprehensiveness purposes.



The implications for practitioners include identifying further opportunities for strategic environmental collaboration, while recognizing that quite a number of approaches have already been attempted, many successfully so. In addition, practitioners might explore how environmental collaborations that have occurred in one area, such as Integrated Resource Planning (IRP) in electric utilities, can be transferred to other areas, such as endangered species, urban development or water quality protection. Finally, users of this framework might be able to identify potential combinations of programs in different cells, such as how IRP might be combined with 'green' codes of conduct, establishing environmental commitment leadership roles among electric utilities.

Hopefully, all three groups, researchers, educators and practitioners, can use and improve upon this framework, with the result of developing clearer cross-sectoral perspectives and collaboration opportunities and more effective environmental policies and programs.

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